The Michigan Antique Radio Chronicle

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A QUARTERLY WRITTEN FORUM OF THE MICHIGAN ANTIQUE RADIO CLUB

VOLUME 31 Winter 2016 NUMBER 4

MARC Your Calendar!

Vintage Electronics Expo

January 28th in Farmington Hills

See Mark Oppat's article on page 16 and the back cover of this issue for more details on MARC's premier Winter Swap Meet.

THE MICHIGAN ANTIQUE RADIO CLUB

The Michigan Antique Radio Club was founded October 19, 1985 at the Dillon Inn in Lansing, Michigan. Present at this historical meeting to found MARC were Jim and Brenda Clark, Larry Anderson, Karl Rommel, Mike Male, Dick Perry and John Kent. The purpose of the organization is to preserve the history and enhance the knowledge of radio, television, and related disciplines, with special emphasis on contributions originating in the state of Michigan. Dues for membership in M.A.R.C. are $25.00 annually (US funds) and payable in January. Officers of M.A.R.C. welcome your membership, your questions and your personal contributions to enhance the service value, growth and activities of the organization. Terms of office for Board members expire concurrently with the summer EXTRAVAGANZA meet held in Kalamazoo, Michigan. Send Correspondence to MARC, 311 Wordsworth St., Ferndale, MI 48220. E-mail: president@michiganantiqueradio.org. **Visit our Web site at** www.michiganantiqueradio.org.

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Call for Photos and Stories

We are always in need of photos and stories from our readers. If you have a good photo of one of your favorite collectables, please send it our way. And if it has an interested story behind it, even better. Also, we are always open to new articles. Or if you have an idea for a topic you would like to see us cover, let us know.

Steve Enzer, Editor

Perspectives

2016 is almost over. A strange and tumultuous year, with many friends and heroes passing on and a very contentious election, now behind us. The holiday season lies ahead and, soon after, the fresh new year of 2017.

With all of the change in the world, it's good to have a hobby- something to focus your attention on and take your mind off of things. With winter settling in around us, it's a great time to cocoon yourself in the workshop and bring some old treasures roaring back to life. All of those projects that piled up during the busy summer months can now come off the shelf, be dusted off, and go under the nippers, pliers, and soldering pencils. Clean that wood, polish that bakelite, and make those old-timers sing again. We're a lucky bunch, when you think about it. We have the special privilege of repairing, restoring, displaying, and using these time machines- links to the past that are still usable and useful today.

One way to share the joy with others is volunteering to give talks and demonstrations. I do a lot of presentations at local libraries and senior centers. I bring four or five radios, a short-range AM transmitter, and some MP3s of old music and radio shows on a laptop. It's good for two hours of entertainment, and a great way to spread interest in and awareness of the hobby. You can also try schools, festivals, and other events that may be interested in learning about old-time radio.

Need some more projects? Need some knobs, caps, dial glass, or other odds and ends for your restoration? We've got a great event coming up on Saturday, January 28, 2017 at the Costick Center in Farmington Hills. Last year, our winter show was very successful, with a marked increase in attendance and sales. We hope we can match or improve upon that mark this year. Come on out and replenish your stock, or buy a table and eliminate some of that basement clutter. Last year, we also had a fascinating array of non-radio electronics; record players, calculators, phones, vintage video games, TVs, and everything else under the sun. I look forward to seeing you all there.

For now, have a happy and safe holiday season!

Jeff

NOTES FROM THE SERVICE SHOP

No. 96

by John Reinicke

In Search of Noise

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The coffee was hot and robust. Betty's breakfast rolls were really good. I had enjoyed my ride to Centerburg taking in the remaining brilliant fall color against the crystal clear blue skies. I was enjoying my morning get together with Ken and Betty at the back of their shop that occupied the former home of the Centerburg Radio and Television shop. As usual, I was enjoying our exchange of family gossip and photos.

I noticed that there did not appear to be any packages ready for shipping and had to ask why.

Ken responded with a grin and a laugh. "Our business is doing just fine, thank you." He could read my concern from the question. "We are now doing all of our shipping and receiving from the facility south of town. We are selling so much furniture these days that it just made sense to do it all from there. Our business address and showroom remains here in town but everything else is down there. I now have a full time employee down there and you will have to meet him. Nathan is a quite motivated fellow with a surprising knowledge of antiques. He finished his degree in Fine Arts here at the college and is now working at night toward his Master's Degree. From my perspective, the best part is that he grew up on a farm and is something of an accomplished handyman. Not only does he know his antiques, he knows how to deal with restoration and to top it off, he can keep the building working as well."

"A rare chap, indeed!" I responded. "So, has anything interesting happened since I was last here?"

"For that, you will have to ask your friend Art. As I recall, you mentioned you were headed to his place after our little confabulation and I wouldn't want to spoil the story."

I gave Ken a quizzical look and he responded. "No, I really don't want to spoil his story. It is right up your alley and you will appreciate it more than the folks that were caught up in it, including us."

I could tell Ken was enjoying my curiosity and, even more, leaving me in the dark. We finished our coffees in time for Ken and Betty to open up for the day. I must confess, Ken's little tease, did add a bit of haste as I walked over to Art's shop. I very much enjoyed the walk in the frosty morning.

As I walked into the shop I was surprised to see Art standing on a steplad-

der next to his bench. With the jingle of the bell on the door he turned his head and greeted me. "Oh, it is you. Good timing if I say so. Come around back here and give me a hand." I walked around the counter and noticed a four-foot fluorescent lamp fixture on his bench.

"Would you mind handing that up to me and holding on to one end. It isn't all that heavy, but it IS awkward." As I picked it up from the bench I wasn't all that sure about the 'not so heavy' part – I thought it was a bit on the heavy side.

I had to agree, that the job of hanging the fixture over his bench was really a lot easier with two than one. Art grabbed the chain at one end and deftly hooked the end over a hook in the ceiling while I held the fixture up. With the one end held, Art swung the other end up and hooked the chain on that end. A short power cord extended from the middle of the top and once the fixture was up, Art stepped on his bench to reach up and plug it in the receptacle in the ceiling.

"If you don't mind, could you go over there and turn it on? It is the middle switch." Art pointed to a wall-mounted box next to the door that connected his shop to the basement of his house. I smiled and nodded silently and walked over and flipped the switch. The four tubes glowed at the ends and then blinked on. Art smiled with satisfaction and gave me a thumbs-up before he stepped off the bench onto the ladder. I noticed that the light did, indeed, provide very good illumination on the bench. I also noted that the fixture appeared to be far from new.

"That is a handsome fixture if you are into 'mid century modern industrial' but, you do know that a modern fixture would be lighter in weight and probably somewhat more energy efficient?" I said with a smile.

Art chuckled, "You are quite correct on all counts, HOWEVER --- " Art held up one finger on his right hand. "New fixtures would not perform one very important function of that fixture." Art swung his arm around to point at the fixture.

I was beginning to understand what that 'important function' might be but I asked anyway. "And that function might be?" I didn't want to spoil his chance to explain something.

Art launched into his explanation. "As you know, I do a lot of work these days on record players. I think it is really interesting the number of folks who have discovered the beauty of analog sound and the sales of vinyl records has opened up a great market for repaired turntables and record changers. When I am working on those loverly old mechanical devices, the good light is important and that four-tube fixture pretty much doubles the light that I got from the two-tube fixture it replaced. I expect the extra light will be appreciated particularly for those of us that need bifocals."

I had to agree about the extra light, since I too, am 'of an age'. "But why an old fixture?"

Art could see that I already knew the reason, but he could pass up explaining. "One of the tests I always do on a record player, be it turntable or changer, is speed accuracy. For that I use a strobe disk that I have had for years." He paused, grinned, and then continued. "OK, I have had it for decades. Anyway, for it to work, it depends on the light source blinking on and off, or strobing if you prefer, at power line frequency. Although it happens too fast for humans to perceive, old fashion fluorescent lamps blink off 120 times per second. The arc in the lamp goes out at each current zero of the 60 Hertz power line and that provides a blink that enables the dots on the

Strobe disk on turntable platter

selling the new electronic ballasts, which are about a third of the cost of the old ones and the old style one just sat there. They were only too happy to sell it to me and I was only too happy to get it.

"Although fluorescent lamps have a reputation for RF interference, the old ones are really a lot better in that department as well. Which brings up a story of a recent adventure I had."

speed to appear to stand still when the turntable is running on speed and that power line 60 Hertz signal provides a time standard that is far more accurate than required for checking and setting turntable speed.

"Modern fluorescent ballasts use electronics to reduce costs since they can use a little ferrite core transformer operating at low RF frequencies instead of a big transformer with lots of iron and copper. Of course the high frequency means the lamp no longer blinks at 120 Hertz and my strobe would no longer work."

I smiled and admired his new old fixture. "Where did you get that anyway?"

"It took me a bit. Actually, I got it a few years back at an industrial surplus store. Since it had a burned-out ballast and was really dirty I got it for only a bit over salvage value. I finally decided to clean it up and put it to use. The tricky part was finding a replacement old style ballast. Since Steven's Hardware south of the square has been in business for decades I decided to check there. I lucked out in that they had one collecting dust on the shelf. It seems they started

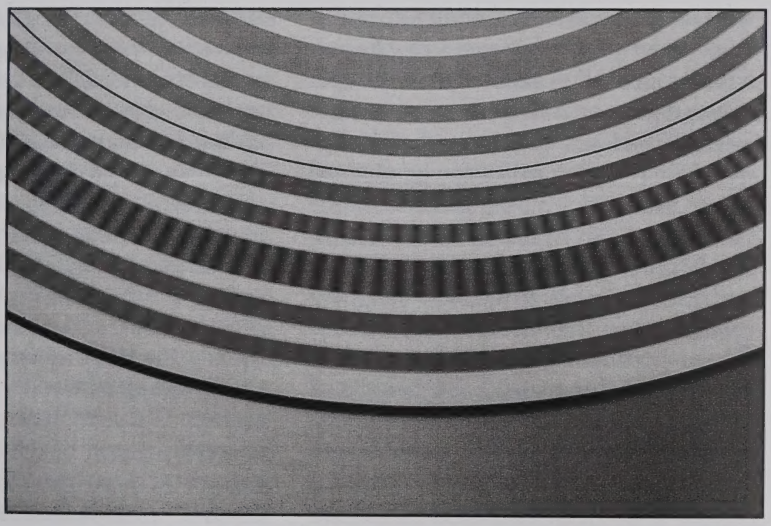
I grinned. "Our friend, Ken, at the antique shop said I should ask you about an event here in town. Might this adventure be what he was talking about?"

"It very well could be!" Art responded with a broad grin and a flourish. "It was a Monday like any other. (Art did a fairly good Edward R. Murrow) And it started simply enough. Jan Batavia drove to the dry cleaner that is between the antique shop and the square. She parked and carried in her order. Now you need to know that Jan drives one of those new cars with the so-called keyless entry and a push button start. When she got back to the car, the door failed to unlock. She thought that odd and used the key to unlock the door. When she got in the car, the push button starter would not work. In fact, nothing in the car appeared to work. She muttered a few words and retrieved her cell phone from her purse to call AAA. To her complete surprise, that wouldn't work either. It showed "no service" on the screen. At

this point her annoyance was beginning to become concern. She went back in the dry cleaner and used their old-fashioned landline phone to call AAA. The interesting thing is that when the tow operator got the car to the dealer everything was OK, including Jan's cell phone.

"If Jan's experience was the only one, the mystery would remain. However, by the time Jan's car got to the dealer there were four more cars with the same problem all parked within about a four-block radius of the north end of the square. In addition to the cars with keyless entry, cars with the chip keys were also failing to start and most of their owners were also experiencing 'no service' on their phones. Stores in the area, including our friends Ken and Betty, were opening for the day and they discovered that their wireless networks were not working.

Those that had wired access to the Internet didn't experience problems, but anyone using WIFI in their stores no longer had access. It took a bit for folks to put the pieces together as the various store owners stepped next door to ask if they had internet access. By this time there were more stalled cars to boot.



Dot pattern standing still on moving platter under fluorescent light when speed set correctly.

"Someone, with a land line, decided to call the police. When Deputy Morris arrived he started to ask what was going on. To his chagrin, his fancy new police car experienced the same problem and all that fancy computer cop gear was also blocked. Fortunately, Jim Morris is no dummy and he quickly deduced that there was some form of radio interference causing the problems. With a mutter, he locked his cruiser and walked the four blocks back to the station. He called the FCC to see if they could offer any help, perhaps out of the Detroit office. The FCC told him to contact the car and network manufacturers. At that point, he gave me a call to see if any of my Amateur friends could help out. After all, Amateur Radio folks are noted for public service.

"I really do like a puzzle, and this was a good one. I called a couple of my buddies who fortunately were off work that day. Tom has one of those network sniffers that connect to a laptop and let you monitor cell and network traffic. It might be of questionable legality, but it really does work well. Bob has a portable spectrum analyzer that covers well into the

low microwave frequencies. Given the description of the problems Bob said he would pick us up in his old Ford pick-up truck. We figured that a 1950 truck wouldn't be bothered by the interference.

"We must have made quite a sight - three guys piling out of a vintage truck with some very modern gizmos. We met Jim Morris at the square and fired up our gear. Tom booted up his sniffer and quickly realized that what ever it was, it wasn't intelligent and therefore probably wasn't intentional. The spectrum analyzer, however, was quite useful. It showed a really broadband noise that appeared to get really bad at the high end of the UHF band into the low microwave frequencies. The worst peaks were at the very frequencies used by cell phones and, worse still, around the frequency used for Blue Tooth communications. The Blue Tooth jamming is what took out the wireless networks and the auto keys. Tom noted that it appeared to be, perhaps, composed of three signals; all producing spurs at around one megahertz intervals and not quite together in frequency. A better jamming signal could not be done. Tom simply did a low whistle and shook his head.

"The four of us then started walking around with Tom's analyzer to see if we could localize the source. It took less than an hour for us to arrive at the frozen yogurt shop about a block north and east of the square. They had a fancy new neon sign in the window and multi colored neon tubes around the store. It took a total of three neon ballasts to power the really quite attractive display. The store-owners were only too happy to help and watched as we set the spectrum analyzer down on a table in the middle of the shop. As we unplugged each of the ballasts in turn, the noise went down. With all three unplugged the noise was gone.

"The neon ballasts were all new electronic models that were from a cheap overseas source. We all noticed that they did not have any approval stamps – no UL, no CSA, no CE, nothing. The store-owners were really quite disappointed because they didn't want to abandon the new display but they agreed to get new listed ballasts and Tom agreed to stop by with his analyzer when they did to be sure the new ones were OK. The owners were even happier to do so after Jim pointed out that unlisted ballasts mounted on the wood window frame might well be a fire risk.

"As we walked back to the truck Tom commented that with switching power supplies circuit board layout is really critical. A circuit trace on the board is actually a transmission line and for Blue Tooth a quarter wave is about an inch. Some trace routing programs really don't take that into account and an errant trace can become a really effective antenna. Testing laboratories are well aware of the possibility and will test for noise. That and the risk of fire and shock is why testing lab approvals are so important. Tom also noted that some shady overseas manufacturers would use fake labels so it pays to be diligent.

"When we got back to the square, Deputy Morris went on his way to check in with people to be sure everything was OK and the three of us piled back in the truck. We all agreed that modern devices, from LED and CFL lamps to all sorts of electronic power supplies could be quite a source of RF noise. We have all noticed that the noise floor has come up quite a bit and that effects all sorts of communication so it is good that Amateurs can help out. I observed that my new cable modem makes quite a racket in the very middle of the AM band which is annoying given what I work on, but at least I know

the source and a few clip-on ferrite beads does seem to help.

"Bob dropped us off at the shop and Tom walked home. I went back to working on a couple of other projects that also produced interesting puzzles."

I grinned and had to agree, that was some story. "I do want to hear about those puzzles, but your talk about the lamp over your bench made me think of something. When I was here last time you were working on those under dash 45-RPM record players from the 50s. As you were talking about record speed disks, it occurred to me – how did you check speed on those and, for that matter, how do you check speed on any 45 only record player?"

"Elementary, my dear Watson, Elementary. (A fair Basil Rathbone) I simply make a copy of my disk on my all-in-one printer. Fortunately the 45 band is in the middle on one side so I can take an old 45 record and carefully center it on the copy of the disk. I then use the record as a template and carefully cut out a proper size disk with an Exacto knife. On the under dash units it can be on top of the record since bottom is played. On a regular 45 player, I just put it on top of the stack of records since the spindle rotates with the turntable. Easy as can be. If I tear the paper or when it gets ratty, I simply cut out another one."

"Very resourceful indeed." I observed. "So what about those puzzles?"

"Ah yes, the puzzles. Isn't it interesting how inscrutable problems can be so educational." We both nodded in agreement and Art continued. "The first was a Pioneer PL630 turntable. The PL630 is a really good automatic turntable that features direct drive and what you could call a massive aluminum platter. The turntable really is quite heavy. The tone arm is balanced by a counterweight with no springs. The anti-skate mechanism also depends solely on gravity. The trip at the end of the record features an optic sensor so there is absolutely no drag on the tone arm. It also features phase lock speed control. In the phase lock position, a crystal oscillator that is very accurate and stable controls the turntable speed. It also has an adjustable speed control and in that mode the speed is displayed on an accurate meter next to the manual speed control. On speed is the middle of the meter and full scale is plus or minus 6%. It really is quite a unit."

"That sounds like quite a neat table. So what was the inscrutable problem?"

Art had a hint of a wry smile. "The problem was that the turntable speed would run away. When you started it up the platter would go faster and faster until it would actually shake like a clothes washer on spin – clearly a problem. I have a manual so, of course, I decided to use it. In the manual there is a series of trouble shooting flow charts and one of the charts was headed Motor runaway. As a general practice one would expect that using a factory engineer devised trouble flow chart in a 'cook book' fashion – working through the tests in the chart – would be the quickest way to find the problem. That would be usually but this time it proved to be my undoing."

I responded with a sympathetic grin and waved for him to continue.

"Well! (Jack Benny this time) I went through the flow chart and the bottom line was that in the chart it called for replacing one or two integrated circuits. They were both proprietary so of course I didn't have replacements on hand. I decided not to expend more effort at that time and put it aside. I decided to see if I could find replacements on line and when I had the replacements, I would resume my repair effort. The replacements resulted in another adventure.

Since this unit is nigh on to four decades old it is not surprising that Pioneer no longer has replacements. I searched on the part number in the hope I might find someone with new old stock replacements. I had no luck with that but I did find Chinese vendors that had the parts. I suspect these are reproduction knock-offs of, well, unknown quality. Their prices were quite reasonable and they both took PayPal – at least they didn't require bitcoins so I decided to take a chance. About two weeks later they arrived in the mail and at least looked good. The knock off Pioneer markings were even better than the originals. As it turns out, one worked fine and the second – the crystal oscillator - was dead on arrival. I contacted the vendor and to his credit, he sent a replacement that was also dead.

"I was now a month plus into this endeavor and was ready to throw in the towel and just junk that table. However, since it was really nice, I decided to check again. The first thing I discovered was that the original oscillator chip was not dead. When I checked the first time, I had set the scope Voltage range too low so the pulse that I was looking for was off the top of the screen and because it was so narrow I had simply overlooked it. I was really embarrassed but got over it. However, even with the other chip in place, it still ran away. At this time I decided to quit using the flow chart and went back to trouble-shooting, as I should have in the first place. I noted that there are a couple of switches in the motor control circuit - one for speed, of course, and one for phase lock or manual speed control. As we all know switches and controls can be troublesome. Sometimes they get dirty, sometimes the grease on them gets hard and sometimes they just corrode. In any event, I quickly discovered that the speed switch, a double pole double throw push button was quite open. A little deOxid quickly remedied the situation and, just like that, it was working fine.

"So what I learned, I think, was a few things. While trouble shooting flow charts may lead you to the problem, never forget to check the obvious first – like dirty switches for example. When the engineers concocted the flow chart, everything was new and I am sure they never considered 40 years of corrosion or even contemplated a 40 plus year life. I should have known better. In my sample of two Chinese reproduction parts, one was bad, so in the future I will approach such things with some caution. Of course, if there are no other alternatives and the price is reasonable, I will still give it a shot. At worst, I will be out a few bucks and at best the problem can be solved."

I nodded sympathetically and observed, "Of course it is obvious once you locate the problem but I wouldn't beat yourself up over taking a while to find what you thought should have been obvious." Art laughed and I continued. "You said a couple of mysteries, what are the others?"

Art was still smirking. "At least I didn't feel bad about that one." He pointed to an impressive McIntosh 1900 on the shelf. "That guy is a highly desirable receiver even if it is solid state and because of that, it was worth the effort. When it came in, it showed signs of a hard life. It had clearly been stored in a location that was, shall we say, less than optimum for humidity and there were signs of rust on the chassis and those really nice covers. With something that has had abuse, I always check for problems before applying power and find them I did. There were blown fuses on the left channel power amp and it did not take long to run down shorted output transistors and a blown driver transistor. Replacements

are readily available and I even had them in stock.

"With those transistors replaced, I felt I could start testing under power. With it powered up, the first thing I noted was that a three-unit filter cap was getting quite warm so, clearly, a replacement was in order. Fortunately, replacements are considerably smaller and could be tucked in under the chassis such that I could leave the original in place to retain the sophisticated look on top.

"Once those problems were corrected I discovered what might have been a really gnarly problem. I found that both the volume and balance controls were open. And, by open, I don't mean dirty and not making contact, they were flat open. At this point I decided to try contacting McIntosh, they are still in business after all. I sent off several emails to the address on their web site and received absolutely no response. I suppose, because I am not an 'Authorized Service Center' they had no intention of replying. With no other choice, I decided to rebuild the controls. When I opened them up I found the resistive traces were absolutely gone. I suspect that they had gone noisy and someone decided to spray them with Blue Shower or other aggressive contact cleaner. One should never ever EVER use aggressive cleaners on pots. The good news is that our friend Mark Oppat in Plymouth had suitable replacement elements and when those arrived the repairs became straightforward – A bit time consuming perhaps, but straightforward.

"With the controls installed, it appeared to work well and sounded quite good. It sounded good, that is, until I turned up the volume. The left channel sounded great, but the right channel sounded really rough. I have heard distortion many times of course, and this time it sounded, well, strange."

"Strange?" I responded with an inquisitive look. I waved for Art to continue.

"Yep, strange. Of course the first thing I did was hook up my dummy load and the scope. As you know, with solid-state amplifiers, the sine wave on the scope looks good until the peak Voltage reaches the power supply 'rails' and then it develops a flat top. That is what I anticipated and the left channel responded exactly that way at a bit over the expected 55-Watts output – just fine. However the right channel wouldn't go past about 15 Watts and the waveform wasn't flat topped at all. When the peak hit just over 15 Volts, it looked like the wave was being chopped back to nearly zero. Sometimes the peak would get to around 19 to 20 Volts before it got chopped. This was happening on both the positive and negative peaks. A check of all Voltages around the transistors showed every thing to be quite normal. A problem like this makes me sit down with a cup of coffee and the schematic to consider just what might cause such a problem. I considered, for example, a transistor opening up under load but since the problem occurred on both positive and negative peaks I didn't think it likely that two transistors would show an identical failure. I also considered it unlikely because such a bad connection would cause a complete failure in short order."

I nodded sympathetically. "So what was it?"

"As I studied the schematic I noted that there is a speaker protection circuit. In high quality amplifiers there usually is some sort of circuit to prevent DC Voltage from being applied to the speakers. After all, you wouldn't want a blown transistor to put rail Voltage on your expensive speaker. I have seen this failure set fire to a cone. In the case of this Mac,

(Continued on page 18)

The Detrola 134 and Pants

By Edward Dupart

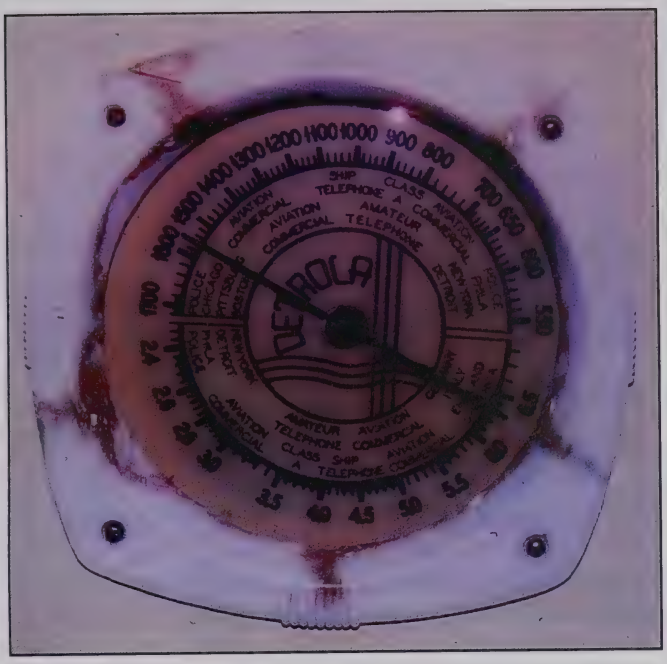
The Detrola 134 was a popular radio of the late 1930's and a lot of us radio collectors probably have some version of it in our collection. They came in a variety of cabinet styles and there were two bezels that they used, one plastic and one metal. The same cabinet could use either bezel. Knobs could vary too. Pictured are two cabinet styles with the wood cabinet being the most popular.

It is a superhet but lacks an IF stage and yet it performs quite well with good selectivity and while the sensitivity is not excellent, it is still fairly good. In the city where there are lots of nearby stations a short antenna is all that is needed. Out in the country and outside antenna is desirable. Image frequency rejection is still quite good, even without the IF stage. Detrola radios generally perform as well as other major brand radios and sometimes better. Dennis Smith, the Detrola expert, attributes this to the fact that Detrola made their own coils and high quality coils do make a difference in the way a radio performs.

When I was about twelve or thirteen I found a white Detrola 134 with the metal bezel in the trash in one of the alleys back in Detroit. I was excited with my find and when I got it home I had to check it out and as I recall, it had bad filter capacitors, an open resistance line cord and a leaky audio coupling capacitor. I had to use some math to determine the resistance and wattage of the dropping resistor I needed to replace the resistance line cord, so it was a trip up to one of the local radio supply houses around me to get what I needed. I probably got the parts at Midway electronics on 6 Mile, just a short bike ride from my house. After replacing those, the radio came to life and I was amazed at how well it worked.

The cabinet was white, which even at that time I thought was unusual, but upon removing the bezel I could tell the white paint was original. So this was a typical kitchen radio, one with an easy

finish to clean. The knobs were also white, but I don't recall the style. This was nearly 60 years ago and it's amazing what I do remember about this radio. The cabinet was still in very good shape and it didn't take much to clean it up. I was lucky considering I found it in an alley and I think it was in a trashcan.



I loved the dial on this radio and I listened to it quite a bit, but I wanted it to pick up CW and SSB. It could tune in the 40 meter ham band and I wanted to make that duck language understandable so I studied BFO's. What I did was create a gimmick capacitor and placed it between the plate and control grid of the 6A7 and put a switch in series with it. Turn the switch on and I had feedback and I could control how much feedback by how many twists I had in the wire. Now I could listen to most SSB and CW with the flip of a switch. I really liked this radio, and while nothing like my RCA 8K, it made for a nice bedside radio with a neat dial to look at.

Those that know me know that I hung onto a lot of my childhood radios, so what became of my white Detrola 134? The time period of twelve to fifteen years was somewhat trying for me. My dad always wanted to be in business for himself and really wanted a hardware store, but he settled on a party store in northwest Detroit that demanded a lot of hours from him

(Continued on page 20)

79 Years Later, Detrola Still Owes This Man Money

By Jim Olson

Travel to Melvindale, Michigan and you will find 99 year old Paul Colosimo still working at Paul's Radio. "I like staying busy," Paul says, looking over the dozens of collector radios crammed everywhere in his small shop waiting for his attention, "But... sometimes, it gets a little over whelming."

Born in Italy in 1917, Paul's parents moved to Detroit when he was four years old. With a natural gift for electronics, Paul wasted no time looking for a job that fit his talents the minute he got of high school.

"It was about 1937 and I applied for a job at Detrola," he recalls. "So they put me a big table between two women. It was just like a conveyer belt – hundreds of parts moving down the table and each three man station assembled certain ones.

"Well, I wanted to be at the end of line where they finished the radios – which took some skill, not in the middle of the line just shuffling parts and breathing soldering fumes all day.

"So after three hours, I asked the supervisor where the water fountain was. She points it out, so I head in that direction and I just kept going out the door. That was 79 years ago and Detrola still owes me for those three hours I worked there!"

Paul Colosimo at his trusty work bench. Shown is a white Detrola from the late 1940's, the color very possibility copied from what Paul originally did when he worked at Les Pen Radio immediately after WWII.

Paul spent World War II on the USS Adirondack, a command ship that carried the brass Admiral who ran the entire fleet. During this time Paul put his electronic skills to good use. "I took care of anything with wires connected to it - the radar, the sonar, the radio, the general compass and any agrological stuff we had on board."

After returning home to Detroit, one of the first places he worked was Les Pan Radio at the corner of Fort and Junction. "At that time it was a great neighborhood," he fondly recalled. Today the building is long abandoned and the area isn't for the faint hearted.

"Well radios were particularly hard to get at this time," Paul explained. "But the owner had connections because one day we got in 25 brand new brown table top radios. I think they were GE. So the manager tells me to paint half of them white, which was a pretty daring thing to do in those days.

"So I take them apart, get some white refrigerator paint and in a couple days we were the only radio shop in Detroit with white radios in our display window.

"Well in no time, those 12 white radios were sold and I was instructed to paint the remaining ones white as well. Which, of course, the owner marked up in price since there was nothing else like them in town.

"This was just after the war and people were starved for the entertainment radios provided. Plus to have one that wasn't brown or black was a big deal. Yes, the manager of Les Pan Radio was a smart guy."

Paul eventually went off on his own, opening Paul's Radio in 1949.

"I could see where Detroit was going, so I opened my shop in Melvindale at the corner of Oakwood Boulevard and Allen Road. It was made of wood so when the city condemned it, I built down the street and opened for business on January 3, 1954 – and I've been here ever since. Putting three kids through college and married for over 60 years to a wonderful, wonderful woman."

Once television became popular – especially after color was introduced in the mid-60's - it killed off radio. "So we switched to selling and repairing TV's. Plus radios became cheaper and you couldn't make money selling them. It's like with TV's today. A radio broke back then, you threw it away and bought a new one because it wasn't much more expensive than what it would cost to repair."

But around the mid 1980's, radios from the 30's and 40's started becoming popular with collectors. And there weren't a lot of people around who knew how to repair them. Today 95% of business at Paul's Radio is repairing collector radios.

"I could use some help in here, but all these kids today are into computers," Paul sighed. "So it's just me."

Even at 99 years old, Paul still puts in 8 hours a day, three days a week at his shop. "I'm in great health, I don't even use a cane. I know that repairing radios keeps me alive and my brain sharp." In fact, since 1937, Paul estimates he has only lost two or three days to illness.

Today Paul also fixes his share of radios that don't stand in just one spot. "I deal with a lot of people who own classic cars and want the original radio to operate. I just finished one for a 1942 Ford.

"Now some of these old radios have problems that really can be challenging to fix. But..." Paul says proudly, "I can't remember one I couldn't get working again as good as new.

"And there is no better feeling than that – especially for a young fella of my age."

Paul's Radio, 18573 Allen Rd., Melvindale, MI 1-313- 928-3322.

The Vintage Electronics Expo is a New Era for MARC

By Marc Oppat

As "Media Relations" volunteer for MARC my job is to promote the club and particularly, our events. Along with the late Ernie Nagy, I have been doing this since about 1990 or so. For many years it involved writing press releases and getting them out to radio, TV, newspapers and any other events listings where folks might find out about us and hopefully come to a show, join the club, or both. Also, I would try to develop relationships with the folks in these media, as many press releases get ignored. Well, time has moved on , many things have changed and I thought this was a good time to talk about them.

As "parts dealers" , myself and wife Leann (yes the one with usually blue or magenta hair) get out to "antique radio" shows in other areas... mainly the Kutztown, PA show near Philly (operated by Renningers Flea Markets... held in May and Sept, we go in the fall only), the Charlotte, NC event in March (cc-awa.org) which is a nice winter get away for us, and occasionally the Chicago area show hosted by ARCI in August. In past years I sold at the AWA Rochester events (the granddaddy of "antique radio" events) at least 6 times. Of course I have also attended nearly every MARC event over the last 30 years. Each event is unique, and the venues range from larger, nice hotels (Charlotte) to "car camping in a field" (Kutztown). The quality and volume of stuff varies and the folks that attend each event are a unique community as well. Leann has enjoyed visiting these other areas and meeting the various collectors, who can be quite memorable folks.

At my home based parts business, 90% of it is from my website and from out of state customers. I guess the in-state folks just wait to see me at one of the MARC shows.

I also get a lot of inquiries from mostly SE Michigan folks who have an item they want repaired. Probably about 10 repair inquiries a week and over 15 parts orders each week. This keeps me in touch with both the collectors and general public.

OK so here is the point to all this... I noticed a few years ago there was a general decline happening at many of the "antique radio" events and those events did not seem to be doing much promotion to the "general public". The same old gray haired guys showed up year after year, but in declining numbers. There also seemed to be a general increase in newbies inquiring about repair or parts for "record players" such as 60's consoles and other older stereo gear. I would mention our shows to those folks and some would come and were very impressed with how much stuff was on offer at our events. Also, that we didn't have just "antique radios" but "vintage audio" , television or video related stuff, and even vintage video and computing gear. This was stuff

our members were bringing but was unknown to the general public. Its all related and all interesting stuff. By the way, most repairs going out the door here now have a 3.5mm cord end jack so they can plug a Bluetooth or phone into the item and stream audio through. Seems nobody under 50 listens to the "radio" anymore !

So, we have the STUFF at our shows, but we were doing a poor job of promoting that overall. And, there were no live shows yet for collectors of vintage audio, or computing or video games. Why not bring those folks in together? They also may just fall in love with some beautiful antique radios ! I thought, first we need to "re-brand" our shows to a more accurate name. Thus, we came up with the "Vintage Electronics Expo" name and logo. It really describes what we have at the shows ! Plus, its an easier handle to promote the shows with. "Vintage" to the younger generation seems to mean anything at least 25 years old, so that seems to be a fair place to use as an limit for what we offer at the shows.

Next, we got a website going for the club, and a Facebook page. The site gets a lot of hits and many folks click on the evaluation feature to find out more about whatever they have (I handle those inquiries, usually about 5 a week) . We really stepped up our promotion of the "Winter Vintage Electronics Expo" last year, including Craigslist, Metro Times ads and Facebook posts on related sites. The attendance jumped up to 520 from 380 the previous year ! There was a LOT of fresh energy in the air at that show and sellers seemed VERY happy.

The younger generation is just now discovering "vinyl" records. They don't know about 16, 45 or 78 rpm, mainly just 33 rpm LP's as that's what's being pressed today for the "hipsters". There are actually about a dozen record stores in the Detroit area still, and they report an upswing in business. Also, tube audio is HOT ! New turntables are being MADE in Detroit even. Hard to believe. Fisher 400, 500, and 800 receivers are very hot, but also Eico, Heathkit, Dynaco and other brands of the 60's stereo boom. Even the common consumer brand consoles such as Zenith, Philco, Magnavox and such are good sellers if they have been refurbished fully. All this stuff is part of our wider umbrella. Don't be afraid to bring these types of items if you have them. Newbies don't know how to fix stuff so the more "operable" items you have, the better.

Our promotions are trying to get the attention of the younger generation. I am hoping to attract 600 folks in the door at Farmington on January 28 2017. I think its an attainable goal. Please mention the show on Twitter, on your Facebook or other social network sites and do anything else you can to help get the word out. We can always use any help ! Finally, if you have stuff to sell, get it ready and get your tables booked! This should be the best ever winter MARC show. We have over 100 tables available for sellers making this the largest winter vintage electronics show in the USA! Its super affordable to sell there and still only $5 general admission.

I appreciate any comments and suggestions. See you there !

(The Shop, continued from page 11)

they use a triac with a diac in the gate. The diac is connected to an R-C Voltage divider with a non-polarized cap as a low pass filter. As long as there is an AC signal, the cap will never charge and the gate will never be triggered. However, if there is DC, the cap will charge and trigger the gate. That will fire the triac and the triac will short the output to ground, thus blowing the supply fuse and saving the speaker. I checked the resistors and the cap and could find nothing wrong. Since they can be tricky to test, I checked the diac by replacement with a new one. No change so that appeared to leave the triac itself. I replaced the triac, and the amplifier returned to normal – full power output.

"I must say, this piqued my curiosity, so I decided to test the triac. With a 12 Volt source I did the light bulb test. The triac is connected in series with a lamp bulb and the bulb should stay off until the gate is triggered and then the lamp should stay on until power is removed. It passed the test at 12 Volts. However, even with the gate shorted, it would trigger at about 20 Volts. Since the triac is rated for 400 volts, I would not expect breakdown until the terminal Voltage was well north of that. In fact, I might expect as much as twice that. So, for whatever reason, that triac was firing at 19 to 20 Volts and that was clamping the output. Under normal conditions, this circuit NEVER operates so this is certainly an odd failure."

I smiled. "Thanks for the insight. Finding that one must have made you happy."

"Indeed it did!" Art responded. "It also reminded me of my personal policy of always checking fancy stereo gear at full output. Sometimes I will do a full distortion test, but I must confess, if it sounds good at full output, I will declare it done.

"Isn't full power testing a little hard on the ears?" I asked with a chuckle.

Art nodded with a knowing grin. "Yes it can be, but my bench speakers are padded by 6 dB – they only get quarter power. My pad is made with 30-Watt resistors that can handle over a hundred Watts for a short time. The resistors will last longer than my patience for putting up with the blast."

I noted that the speakers were located overhead, out of the way of any bench activity and the connections came to terminals on the front of the bench – all very convenient. "So now that you have that really great light, what is next on the bench?"

"That!" Art pointed to a 1936 Vintage Zenith console. I could hear some considerable distain in his voice. I walked over to the radio. The cabinet was, well the only term could be, mint. Except for some very aesthetic patina, the finish was as nice as the day it left the factory. The chassis was clean and shinny. The dial was perfect and the dial glass was even clean. Except for a missing line cord, it appeared perfect.

I stepped back and gestured toward the radio. "That thing is beautiful! I would love to know how it was stored to keep it so nice. So why the sour note in your voice?"

Art shook his head. "Ah, beauty can be deceiving. Very deceiving! (a fair rendition of The Shadow) The customer that brought it in mentioned that he had found it at one of our Antique shops. Now, I know it didn't come from Ken and Betty, because they always bring radios to me to check out. At any rate, he noticed the missing line cord, and since it

was so nice, he figured that was about all that would be wrong."

"I gather there was something else wrong." I responded.

Art gave a wry chuckle. "Indeed there was. When I got the chassis out I noted that some 'so and so' had been there before. Now you do know that when I say 'so and so' it is because I don't want to use any bad words or imply the previous mechanic might have been the offspring of a female dog."

"I see. So what was wrong?" I had to admit, he had tweaked my curiosity.

"As you know, the capacitors in old radios fail with age. Electrolytic caps will be all dried up and might be shorted and paper caps will be leaky or shorted. That is why we re-cap radios. Now of course you and I might be inclined to replace them one at a time such that we can keep track of where things came from. Our previous mechanic obviously knew about bad caps, but it appears he decided it was best to remove all of them first. All, and I do mean all, of the caps under the chassis have been removed. He also must have found some off value resistors as well, because it sure looks like some of them are gone as well. If that weren't enough, I am afraid some wires with crumbly insulation have also been removed. He even removed the silver mica caps and we both know those are seldom bad and replacements can be scarce. Now you and I also know that at times, those old Zenith radios would have flying splices where two or three leads might simply be soldered up in the air and not landed on a terminal as such. I am guessing the previous mechanic got out all of those parts and then realized the situation he had created. He must have been thoroughly befuddled and simply gave up. I confess, I haven't checked to see if the tubes are in the right sockets, or indeed, the right tubes. It doesn't matter much at the moment."

"Wow!" It was about all I could think of to say without using bad words. "So what is your plan of attack?"

"I already checked my copy of the Zenith Service manual and compared it to the Riders just to be sure they agree. In those days, they sometimes made changes on the fly in the middle of a production run. In this case, they agree, which is a good thing. Unfortunately neither of them has an under chassis parts layout. So I will make a copy of the schematic and check it wire by wire and mark things off with a yellow highlighter as I go. Of course I will follow that with a performance check and alignment. I have already warned my customer this will be an expensive repair and he was OK with that."

We both agreed that Art had more than a few bench hours ahead of him on that radio. We took time out for a cup of coffee and a chance to catch up on family gossip. When we were done, Art plopped the chassis on his now well-lit bench and I headed out into the crisp cool day.

Author's note: Centerburg is, of course, a figment of my imagination and these tales are fiction but the technical information is not. The incident with the bad neon fixture is based on a real incident. A bad fixture really did knock out WIFI, cell phones, and disable vehicles. And, indeed, it was members of the Amateur Radio community that worked with the police to resolve the issue.

(Detrola 134, continued from page 13)

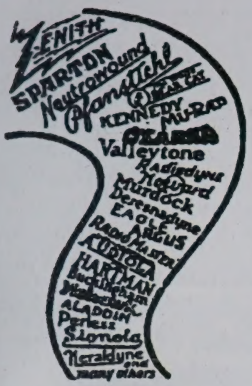
and my mother. I would see them in the morning, but they wouldn't get home until 10-11 o'clock at night and they weren't making any real money. Remember the Home Alone movies? My sister and I were home alone in the evenings for about three years and it's a wonder we stayed out of trouble, but we did. I would head down to the main library in downtown Detroit right after school taking the bus to get there and the librarians would kick me out at 9 PM when they closed. That was a time when I could really study electronics and I became familiar with the Rider manuals and they had all of them. I was beginning to repair radios for other people and so I would run copies of the schematics for their radio from the Rider manuals. The early Xerox machines did it in negative fashion with white wires and symbols and a black background. Rather annoying, but it was better than nothing. I would hop back on the bus and I was home before my parents got home. I'm not sure what my sister did, probably spent time with her friends.

My dad was able to keep the basic bills paid and that was about it. No extra money for clothes for me. I had to go to a thrift shop for clothes and I remember having to wear 1930's style pants to school and for a 7th grader that was absolutely embarrassing. So my white Detrola 134 was sold so I could buy up to date pants. From then on my radio money paid for my clothes and shoes.

When I was about sixteen my dad finally sold off the party store and the flower shop, yes, he tried a flower shop and that wilted like old flowers. He got a job at a hospital doing maintenance and he was always good at that and he had a decent salary. He was actually a carpenter and did side jobs when he had the party store and those side jobs are what probably saved us from going totally broke.

I always wanted another white painted Detrola 134, but the painted ones seemed to be fairly rare, at least for me. There's probably somebody out there that has a dozen of them sitting around their house. The wood ones are fairly common and I have had several of them and I have fixed them up and they usually find a new owner, but at least I don't have to buy pants with the money I get from them. I have a nice wood one with the metal bezel, but I was still after a painted one, preferably a white one. What did come my way was a very pastel yellow one and I thought sure someone painted it yellow. I checked under the bezel, which happens to be a plastic bezel and under the grille cloth and it turns out that was the original color. The paint was in pretty sad shape so I had to do some searching to find the right shade and color yellow and I did find it and so I repainted it and the radio does look nice. I think this is the only painted Detrola 134 I have seen at the radio shows.

Now you know why I had pants in the title.



The Classified Ads

As a MARC member, you are entitled to one FREE posting per issue. Please e-mail your ad to the address below, or snail-mail a legibly written ad to: Steve Enzer, Editor, MARC Chronicle, 12740 Monroe Pike, Brooklyn, MI 49230. E-mail: enzer@binsys.com.

Please note that ads for the Winter issue are due by March 1st.

REPAIR SERVICE: I repair old tube type radios. Have stock of old type tubes and parts. Paul Colosimo, 19111 Wood St., Melvindale, MI 48122. 313-928-3780, 313-928-3322 (office).

REPAIR SERVICE: I repair all tube type radios. I have most parts and tubes in stock. Dan Schnaidt, 14160 Hay Rake Hollow, Chelsea, MI 48118-9525, 734-475-1968, 734-417-6995 (cell).

FOR SALE: ARBE-III, Universal Battery Eliminator, $159.95 + $15 S/H. Michigan residents, please add $9.00 sales tax. The ARBE-III is designed to provide the power requirements for most pre 1930's battery operated radios. The custom wound power transformer provides 3 electrically isolated supplies (A, B, C) which are all regulated and short circuit proof. Comes assembled, tested and with a full five year warranty. Please refer to our website at www.arbeiii.com for direct purchase using PayPal. You can contact me at 517-787-2985 for details on money order or personal check payments. We are also offering custom wound audio transformers for early radios. $19 each or $20 each for the center tapped version plus S/H. See our website for other items offered. You can reach me at arbeiii@yahoo.com.

FOR SALE: PARTS! We have a full stock of radio supplies, including capacitors, tubes, knobs (including our two types of real wood repros!) , bulbs, tube shields, etc. Our two specialties: repro radio dials (we bought the former Clint Blais repro dial business in 2003, and they are still the best!) and we can duplicate or repair most old volume or tone controls. Phono needles, carts and wheels too. Email any wants or see our website at www.oldradioparts.net Over 30 years servicing radios here! Mark Oppat mop-pat@comcast.net 253 Blanche St, Plymouth, MI 48170 734-455-4169 11am-9pm most days.

FOR SALE: Reproduction radio dial belts and dial cord to fit all radios. Bronze tuner cable for early RADIOLA models. Tuner repair kits for many ATWATER KENT radios. Complete details at www.Adamsradio.com. Adams Manufacturing Company, PO Box 1005, Lincoln Park MI 48146.

FOR SALE: 1% Precision tolerance 500V silver mica capacitors and **1% Precision** 630V tubular axial PSA polystyrene film capacitors. Also for sale are 1000 Volt silver mica capacitors available in many different pF sizes. All capacitors are new production. For price list and product info, please contact Dave Cantelon, 6 Ferncrest Gate, Scarborough, Ontario, Canada, M1W 1C2 ; phone 416-502-

9128; Email: justradios@yahoo.com or visit WebSite: www.justradios.com

FOR SALE: – Repro Antique Radio Dial Covers – Mark Palmquist - Retro Radio Repair www.dialcover.com 5033 Arbor Ln, Lilburn, GA 30047 (770) 923-8929 jmpalm@mindspring.com

FOR SALE: Phono and tape recorder wheels, belts. Phono needles, cartridges, 45 adapters, centerposts for all brands. Our specialty: massive inventory of V-M Factory Service parts, manuals. Also buy same for stock. Visit www.thevoiceofmusic.com or email info@thevoiceofmusic.com with what you have or what you need. Phone (248) 478-0990 anytime before 9pm. Gary Stork, 37530 E. Meadowhill, Northville, MI 48167

FOR SALE: Radio grommets, washers, and other rubber parts, repro knobs, push buttons, NOS and repro clock radio knobs, Motorola VT71/73 T.V. masks and knobs, and more. See them all at www.renovatedradios.com. Ed Schutz: blacksmith@renovatedradios.com (586) 697-6153.

FOR SALE: 1955 Lowery Double Key Board Electric Organ with beautiful Mahogany Cabinet, 55 tube unit, very powerful in its day, $400.00 selling as is. Variety of older ham tube equipment. Quite an assortment of ham magazines, 1970-1990s. Battery radios from 1920s, no horns but complete. Variety of transmitting tubes: 807, 866, 832, 815 etc. Portable Bakelite and wooden TVs early 1950s. WANTED: Kennedy console or table model radio. Can be rough needing work or restored if price is right. Phone Gary Clayton, The Olde Tyme Radio Centre, Belgrave, Ontario, Canada NOG 1E0, 519-357-4304, oldetymeradio@tnt21.com, http://www.oldtymeradio.ca/.

FREE: Heathkit GR 2000 television set. This is the ultimate Heathkit TV from 1979 and it was working when I parked it. It does not have a cabinet. I will also include a spare CRT. Just pick it up and it is all yours. Located in the Detroit metro area call or text me at 248 202 2175. John Reinicke

WANTED: Reuben Smith 5-tube TRF battery radio manufactured in Lansing, MI circa 1925. I traded this radio off to Oran Sauder (RIP) maybe 20 years ago. My radio had a glass front panel as well. Any assistance in relocating this radio for my personal collection would be greatly appreciated. Jim Clark, 517-648-2785 or jc072651@aol.com. Thank you.

FOR SALE: 1933 Philco Cathedral Model 66 $45.00; 1931 Gloritone Cathedral $60.00; Americana Spice Chest $25.00; Zenith Console Model 8A02 $60.00; Resas Tone A Dyne Battery Set $65.00; National NC-303 clean with manual $85.00; 2 Hallicrafters S40A $30.00 each or both for $50.00; 2 Hallicrafters S41G $25.00 each or both for $40.00; Other misc radios, wood, plastic, transistors, price $2.00 to $30.00; Misc test equipment CHEAP; Radio Literature and other misc radio related items. Pick up only. Alan Reed, 2875 Geneva Hwy, Manitou Beach, MI 49253. 517-547-7570 Evenings.

FREE: RCA "New Vista" color TV, Model CL 670 F, chassis no. 14 crc 38 XT, CRT no. 25XP22. It's an all-tube chassis with a Nuvistor front end. Good condition except for moisture damage on bottom of legs. I can e-mail photos. Located in Bay City. Contact me by e-mail, ccampbell1873@charter.net, or by phone, 231-944-9044. Chris Campbell.

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Call for Articles

Your editor is always looking for new articles. Many of our readers have indicated a preference for articles related to collecting, as opposed to highly technical pieces. Of particular interest are personal accounts of a particular restoration you might have done, or historical accounts related to our hobby. But all subjects related to vintage electronics are welcome.

If you have an idea please feel free to discuss it with me, either by phone or email.

Steve Enzer, MARC Chronicle Editor, enzer@binsys.com. 517-592-2841

Paid Ads Accepted

The *Chronicle* accepts paid **business card sized ads**. The ad may be in the form of your business card, or other text/graphics of business-card size. All submissions must be camera-ready. We will not do any typesetting, but simply copy what you send us. Also, your ad can appear on the MARC website at no extra charge.

Rates: $10 per single issue, $35 per year (four issues).

Please send all submissions to:
Steve Enzer, MARC Chronicle Editor,
12740 Monroe Pike, Brooklyn, MI 49230
Enclose a check for correct amount payable to MARC.

Winter Meet January 28th in Farmington Hills

Vintage Electronics Expo Powered by MARC

Date: Saturday, January 28, 2016.

Location: Costick Activities Center, 28600 Eleven Mile Road, Farmington Hills, Michigan. Entry is at Gate 4, Door A.

Time: Setup starts at 7:30 AM for sellers. Also, Early Bird admission for buyers is at 7:30 AM. General admission is from 9 AM to 3 PM.

Admission Fees: $5.00 for general admission, $10 for Early Bird admission.

Activities: Flea Market, Equipment Contest, 50/50 Drawing, Seller's Drawing, Silent Auction, and Donation Auction, and special presentations.

Contest Categories:

All collectors have items that are special to them. We encourage you to show them off at our meets, and this the contest is the place.

- **Michigan Radios:** Any radio built in Michigan.
- **Ugly Radios:** We have all seen radios where either design or circumstance makes them painful to look at. Show us yours!.
- **The Open:** Any vintage electronic item including radios, televisions, test equipment, calculators, and games.

Host: Rob Murrell. Please direct all questions and send table registration forms and fees to Rob at 2420 Princeton, Berkley, MI 48072. You will receive a reservation confirmation. For information call Rob at 248-399-2149.